

**ABSTRACT**

The method of manufacturing a semiconductor device of the present invention comprises: forming a resin layer on a surface of a semiconductor wafer on which a plurality of semiconductor elements are formed, forming through-holes on the resin layer, a first cutting of either the semiconductor wafer or the resin layer, mounting conductive balls on the through-hole, connecting the conductive ball to electrodes of the semiconductor element, and a second cutting for dividing the wafer into each piece of semiconductor devices. With the processes of the present invention, conductive balls can be easily and effectively mounted on a wafer under optimum conditions, without failure such as slipping or falling down from the required position. This fact contributes to an increased efficiency and a good productivity in the production of semiconductor devices.